

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

A292.9
S03W2
Cop. 3

WATER SUPPLY OUTLOOK FOR UTAH



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**UTAH STATE DEPARTMENT OF NATURAL RESOURCES
-- DIVISION OF WATER RIGHTS**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAR. 1, 1977

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia





You may have less Irrigation water this year than ever before.

SNOW COURSE MEASUREMENTS MADE ON MARCH 1, 1977 CONTINUE TO INDICATE THAT MANY AREAS WILL HAVE SEVERE TO CRITICAL WATER SHORTAGES. STUDY THE ATTACHED WATER SUPPLY FORECAST CAREFULLY FOR STREAM FLOW AND/OR RESERVOIR STORAGE FIGURES THAT CONCERN YOUR AREA. KEEP IN TOUCH WITH YOUR IRRIGATION DISTRICT OR OTHER OFFICIALS FOR ESTIMATES OF THE SUPPLY AVAILABLE FOR YOU. YOU MAY FIND YOU'LL NEED TO CHANGE CROPS, PLANTED ACREAGE, TIMING OF WATER APPLICATION OR EFFICIENCY OF YOUR WATER DISTRIBUTION SYSTEM. THESE ARE SOME OF THE EARLY DECISIONS AND PLANS YOU MAY HAVE TO MAKE:

1. Change to crops which require less water.
2. Reduce the crop acreage. Naturally, this will affect the fertilizer you order and the amount of seed you buy. Be sure unplanted land has cover crops to prevent wind erosion.
3. Check out your irrigation systems carefully. Make certain that ditches have no water-wasting weeds or debris to slow delivery; that sprinkler heads don't have leaks, pipes have tight connections and pumps work properly. If new parts or equipment are needed, purchase them soon.
4. Plant only the best land - it makes most efficient use of water. If your soil has been mapped, local Soil Conservation Service personnel can guide you. If not mapped, they can still give you general information.
5. Maintain close contact with the Soil Conservation Service or your local Conservation District for the latest water supply forecasts, and for soil information. SCS has just published water conservation TIPS pamphlets for irrigators, farmers and ranchers. Get copies.
6. Maintain close contact with the Agricultural Stabilization and Conservation Service county office. Funds for cost sharing on special water stretching practices may be made available because of the drought situation. ASCS also administers the Federal Disaster Assistance program.
7. Do the same with your closest Farmers Home Administration office. Special loans may become available.
8. Do the same with the local Cooperative Extension Service office for current information on crops, feed supply and marketing.

SCS, ASCS AND FMHA ARE LISTED IN THE PHONE BOOK UNDER "U.S. GOVERNMENT, AGRICULTURE, DEPARTMENT OF." THE EXTENSION SERVICE IS USUALLY LISTED WITH LOCAL COUNTY OFFICES.

WATER SUPPLY OUTLOOK FOR UTAH

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

|||||

Released by

GEORGE D. McMILLAN

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

In Cooperation with

DEE C. HANSEN

STATE ENGINEER
DIVISION OF WATER RIGHTS
UTAH STATE DEPT. OF NATURAL RESOURCES

|||||

Report prepared by

BOB L. WHALEY, Snow Survey Supervisor

and

KENNETH C. JONES, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
4012 FEDERAL BUILDING
SALT LAKE CITY, UTAH 84138

PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on
UTAH and BEAR RIVER WATERSHEDS

MARCH 1 1977

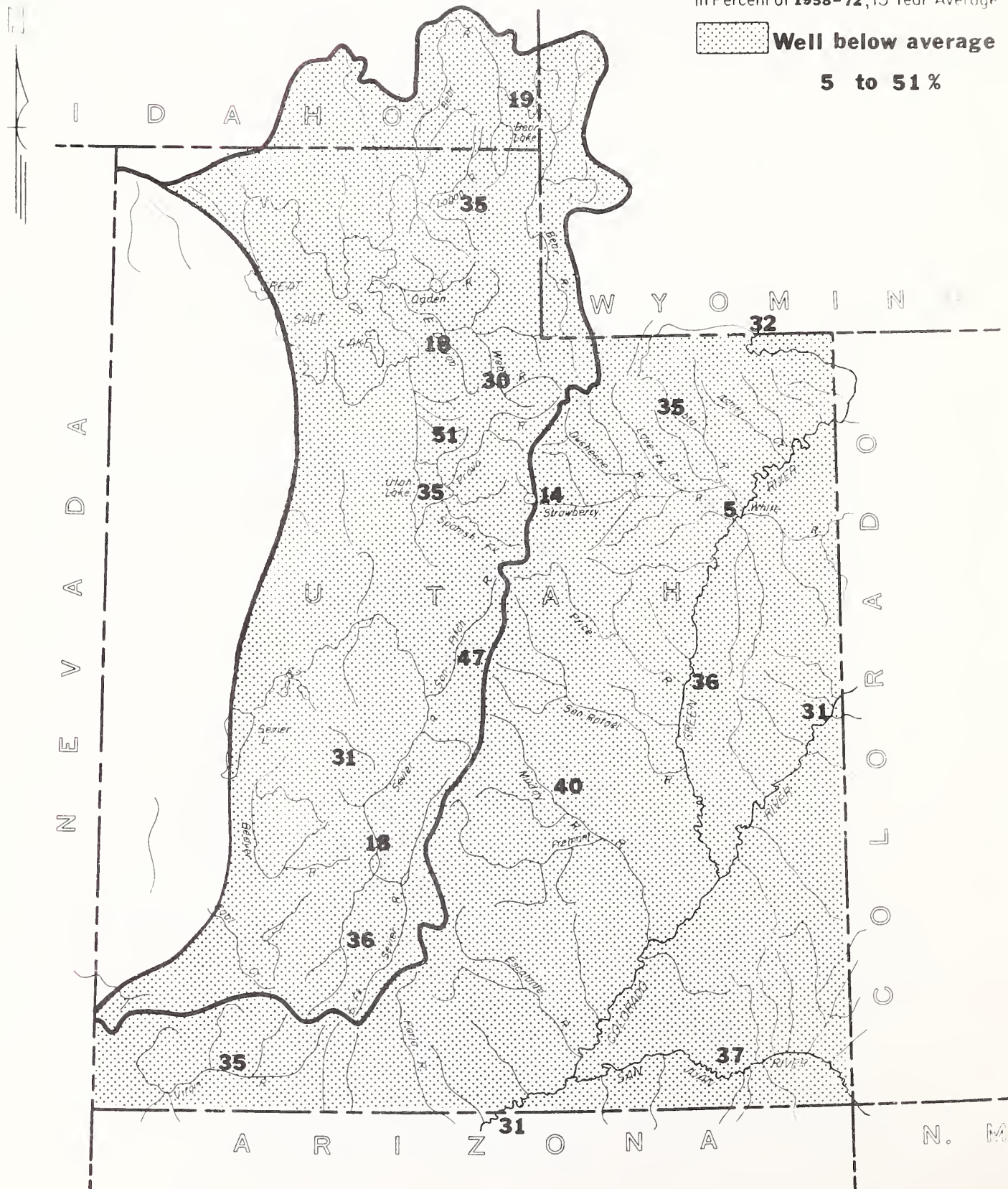
Approximate Date



FORECAST STREAM FLOW
in Percent of 1958-72, 15 Year Average

Well below average

5 to 51 %



SNOW COVER

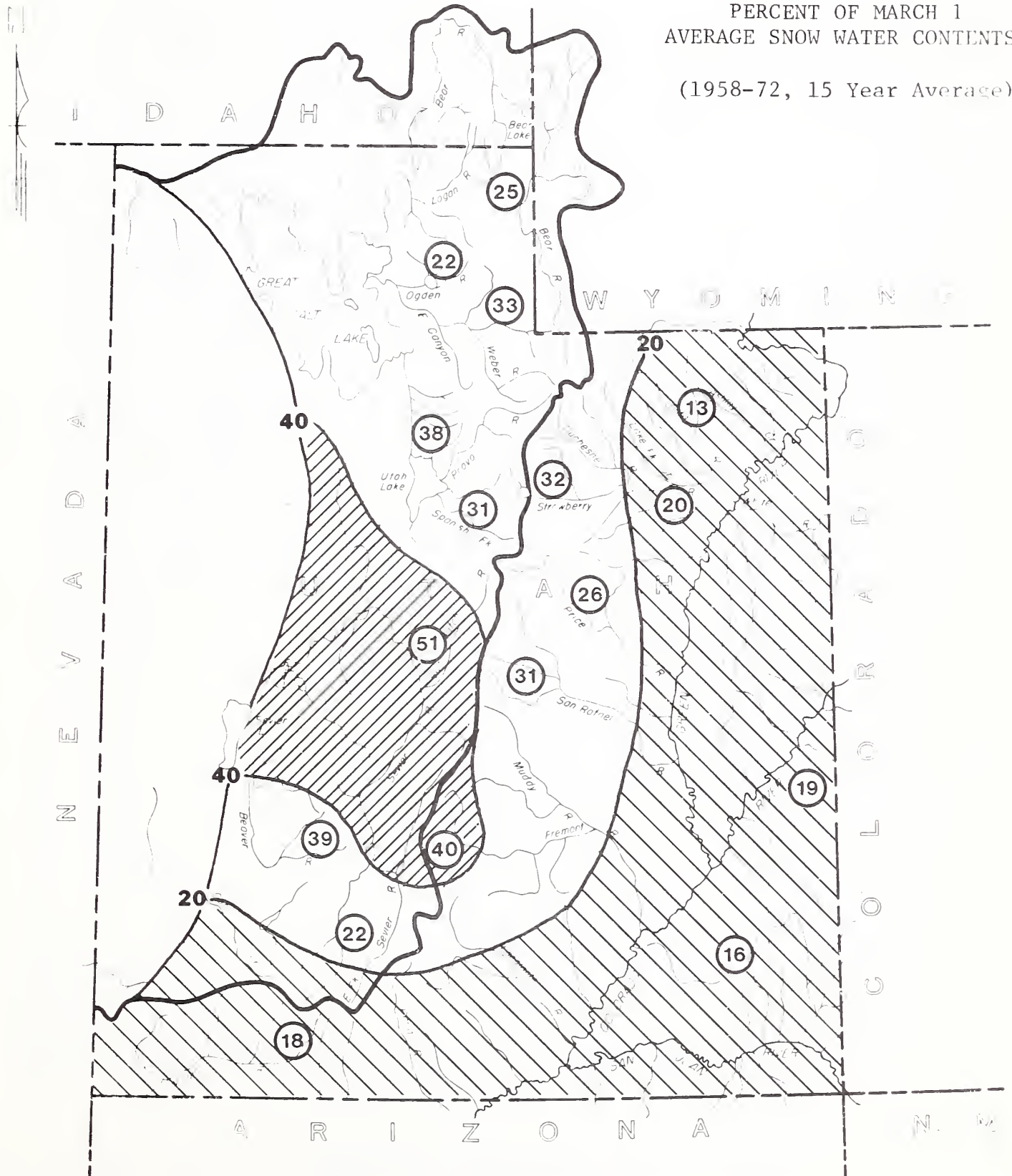
Based on Snow Surveys Made on
UTAH and BEAR RIVER WATERSHEDS

March 1, 1977

Approximate Date



PERCENT OF MARCH 1
AVERAGE SNOW WATER CONTENTS
(1958-72, 15 Year Average)



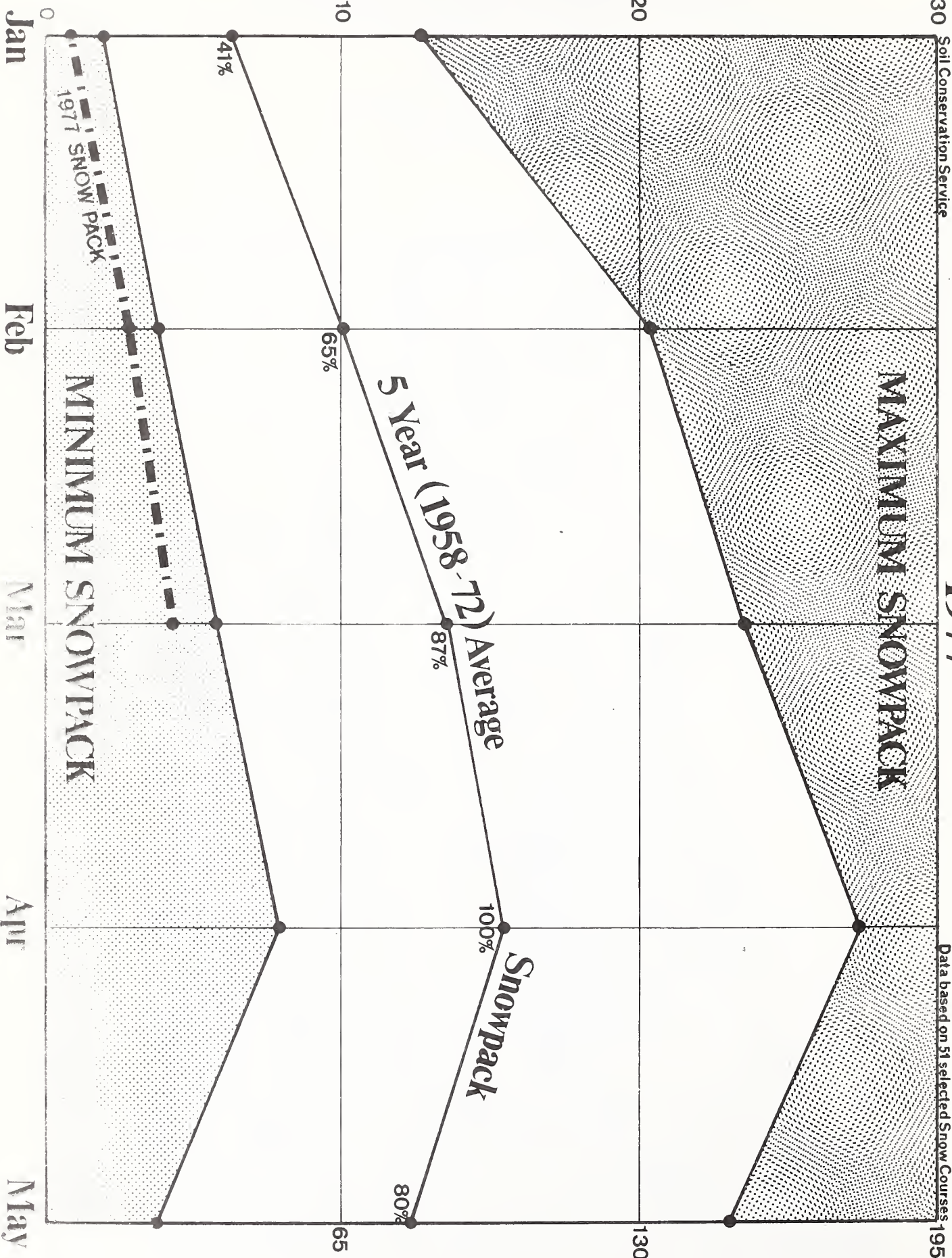
UTAH'S WINTER SNOWPACK

1977

Soil Conservation Service

Data based on 51 selected Snow Courses 195

SNOW WATER EQUIVALENT
(inches)



PERCENT of APRIL 1 S.W.E.

WATER SUPPLY OUTLOOK

as of
MARCH 1, 1977

* * * * *
* Utah's water supply outlook is still poor for those areas *
* not on reservoir storage. Snow cover ranges from 1 to 51% *
* of the March 1 average. Reservoir storage is now 114% of *
* the March 1 average, but much less than last year at this *
* time. Streamflow forecasts range from 5 to 51% of the *
* April-July average. *
* * * * *

SNOW COVER

Snow measurements taken the last week of February show water contents below previous record lows except on the Virgin and Fremont Rivers. Statewide snow cover is 28% of the March 1 average and ranges from 1% on the Enterprise-New Harmony drainages to 51% on the Lower Sevier. In general, the eastern third and southern quarter of the state have less than 20% of the March 1 average snow water contents. A band including northern and central Utah, the Upper Sevier and Beaver Rivers have 20 to 40% of average while an area of the Lower Sevier and Fremont Rivers are 40 to 51% of average.

By March 1, Utah should have 87% of an average years' snow water. This year, an average of 51 snow courses shows only 27% on the ground as of March 1. We would need very heavy, continuous storms to make up this 60% deficit by even May 1.

PRECIPITATION

Mountain precipitation stations ranged from 15 to 103% of the February average. The October-February totals ranged from 18 to 83% of average.

SOIL MOISTURE

Watershed soils still have well below average moisture.

RESERVOIR STORAGE

Storage in 24 of Utah's reservoirs is 114% of the March 1 average, but well below last year at this time. Many smaller reservoirs are below average at this time.

STREAMFLOW FORECASTS

Forecasts of spring and summer streamflow were reduced as much as 20% from February 1. Many forecasts are below 1961 low year and approaching the record low of 1934.

Forecasts now range from 5% of average for the Duchesne at Randlett, to 51% for Little Cottonwood Creek near Salt Lake. Weber River at Oakley is forecast 41% of average, Pineview Inflow 18%, Bear River at Utah-Wyoming Line 36%, Bear at Harer 10%, Logan River 35%, Blacksmith Fork 29%, and Little Bear 24%. Lost Creek near Croydon is forecast at 8% of the April-June average, East Canyon 18%, and Chalk Creek 16%.

WATER SUPPLY OUTLOOK (continued)

Streams above Salt Lake now range from 12% for Parleys Creek to 51% for Little Cottonwood.

Provo River is forecast 25% at Hailstone and 17% below Deer Creek Dam, American Fork 27%, Hobble Creek, Spanish Fork, and Strawberry Inflow are each 14% of the April-July average.

Uintah Basin streams are forecast from 5% for Duchesne at Randlett to 41% for Lakefork and Rock Creeks. Ashley Creek is forecast 37%, Whiterocks 33%, Uintah 35%, Yellowstone 40%, Duchesne at Tabiona 27%, and Strawberry River 11%.

Price River forecasts range from 24% for Scofield Inflow to 16% at Heiner.

San Rafael forecasts range from 38% on Huntington Creek to 41% on Ferron Creek. Muddy Creek is forecast 40%, and Seven Mile Creek below Fish Lake 47% of the April-July average.

Mill Creek above Moab forecast is 41% of average. Virgin River is forecast 35%, and Coal Creek 34% of average.

The Sevier River is forecast 34% at Hatch, 36% at Circleville, 16% at Kingston, and 33% at Gunnison. Clear Creek is expected to be 31% and Salina Creek 16%.

Beaver River is forecast 36% of average near Beaver, but only 16% of average for Minersville Inflow.

Water users without good carryover reservoir storage are expected to have limited water supplies this season. Water conservation practices should be applied which will produce the most from a short, early runoff.

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



STREAMFLOW FORECASTS have been reduced 3 to 9% since February 1, and now range from 8 to 35% of average for the April-July runoff period. The Bear River, at Utah-Wyoming line is now 36% of average, at Harer, Idaho 10%, Logan River 35%, and Little Bear 24%. Most streamflow is expected to be near the previous minimums of 1961.

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS			THIS YEAR		PAST RECORD		BEAR RIVER BASIN in UTAH SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET		RIVER BASIN and or SUB-WATERSHED	Number of Courses Averaged	
	Thousand Acre Feet	Percent of Average		Last Year ²	Average ⁺			
BEAR RIVER								
Bear at Harer, Idaho ¹	30	10	Apr-Sept	- -	297	BEAR RIVER	23	
Bear nr Randolph	8.3	8	Apr-July	85	102	UPPER BEAR RIVER	2	
Bear nr Ut-Wyo. State Line	40	36	Apr-July	80	112	LOWER BEAR RIVER	21	
Bear nr Woodruff	25	19	Apr-July	108	131	LOGAN RIVER	4	
Big Creek nr Randolph, Utah	0.8	19	Apr-July	- -	4.2b			
Blacksmith Fork nr Hyrum	14	29	Apr-July	54	48			
Little Bear nr Paradise	8.0	24	Apr-June	37	34			
Logan nr Logan ¹	40	35	Apr-July	114	113			
Smith's Fork nr Border, Wyo.	35	30	Apr-Sept	- -	116			
Thomas Fork nr Ut-Wy State Ln	6	19	Apr-Sept	- -	32			
Woodruff Crk nr Woodruff, UT	3.7	24	Apr-July	13	15.4			
1 - Observed flow corrected for change in storage and diversions								
2 - Provisional flows - Subject to correction								
b - Average of all past record - less than 15 years								

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average
BEAR RIVER	Bear Lake	1421.0	1040.3	1049.4	958.3
	Woodruff Narrows	26.5	3.0e	26.5	21.6
LITTLE BEAR	Hyrum	15.3	13.1	10.4	10.7
	Porcupine	11.3	3.9	4.0	3.6
+ - 1958-72 15 Year Average Period e - estimated					

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
	Forecast Range	Average
Big Creek nr Randolph	5 - 10	41b
Logan River nr Logan	350 - 450	984
Woodruff Creek nr Woodruff	25 - 50	240
Little Bear nr Paradise	150 - 200	473
(a) - Maximum mean daily peak flow		

UNITED STATES DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 Federal Bldg. - Room 4012
 Salt Lake City, Utah 84138
 OFFICIAL BUSINESS
 PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
 U. S. DEPARTMENT OF
 AGRICULTURE
 AGR-101



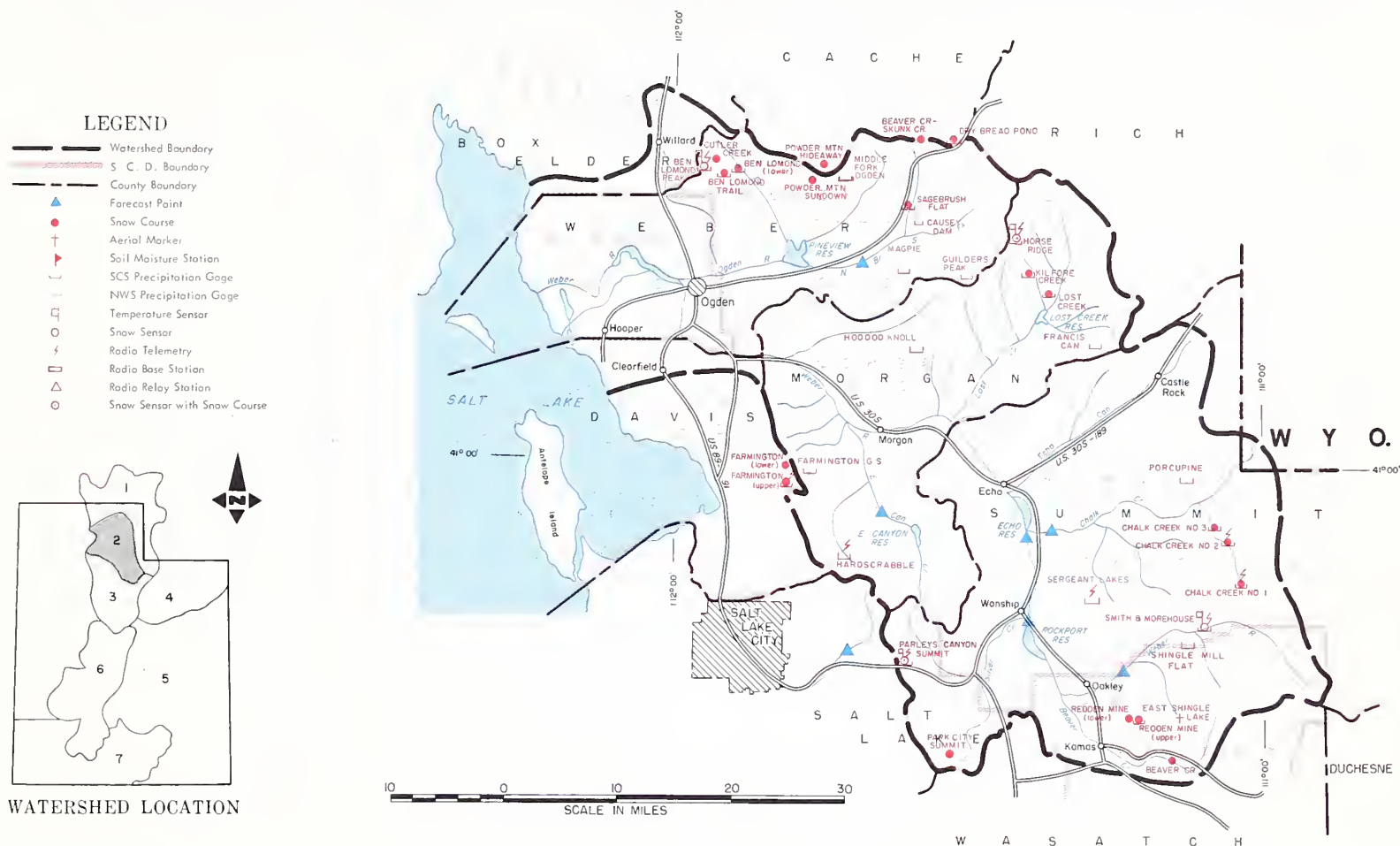
FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK

WEBER-OGDEN WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



THE WATER SUPPLY OUTLOOK IS WELL BELOW AVERAGE

SNOW COVER has improved only 3 to 9% since February 1 and is now 22% of average on the Ogden and 33% on the Weber River. Most readings are below previous minimums in 1961.

PRECIPITATION at mountain stations during February ranged from 30 to 96% of average. The October-February total is still only 18 to 41% of average.

SOIL MOISTURE is still well below average.

RESERVOIR STORAGE is above average, but generally less than last year at this time.

STREAMFLOW FORECASTS range from 8% of the April-June average on Lost Creek to 41% of average for the Weber at Oakley. Pineview Inflow is expected to be 18% of average, East Canyon also 18%, Rockport Inflow 30%, and Chalk Creek 16% near Coalville. Most streamflow forecasts are near previous minimums in 1961.

WEBER-OGDEN WATERSHEDS in UTAH

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average +
<u>WEBER-OGDEN RIVERS</u>					
Chalk Creek at Coalville	5.0	16	Apr-June	29	32
East Canyon Creek nr Morgan ¹	4.0	18	Apr-June	22	22
Hardscrabble Crk nr Porterville	3.5	24	Apr-June	- -	14.4b
Lost Creek nr Croydon, Utah	1.2	8	Apr-June	10.9	13.7
Pineview Reservoir Inflow ²	20	18	Apr-June	93	110
South Fork Ogden nr Huntsville	15	30	Apr-June	43	50
Rockport Reservoir Inflow ¹	34	30	Apr-June	- -	114
Weber nr Coalville	27	24	Apr-June	- -	113
Weber nr Oakley	41	41	Apr-June	90	100

- 1 - Observed flow corrected for change in storage and diversions
 2 - Inflow record as computed by U.S. Bureau of Reclamation
 3 - Provisional flows - Subject to Correction
 b - Average of all past record - less than 15 years

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average +
<u>OGDEN</u>	Causey	6.9	2.6	1.1	2.2
	Pineview	110.1	54.4	46.2	40.6
<u>WEBER</u>	East Canyon	48.1	31.8	35.7	19.5
	Echo	73.9	47.6	45.6	43.5
	Lost Creek	20.0	13.0	13.6	12.6
	Rockport	60.9	26.0	44.6	27.6
	Willard Bay	193.3	146.1	162.9	121.5

+ - 1958-72 15 Year Average Period

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS A PERCENT OF	
		MINIMUM	Average
OGDEN RIVER	6	47	22
WEBER RIVER	10	65	33

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
	Forecast Range	Average +
Lost Creek nr Croyden	20 - 80	206b
South Fork Ogden nr Huntsville	100 - 200	697
Chalk Creek nr Coalville	75 - 150	373
(a) - Maximum mean daily peak flow		

UNITED STATES DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 Federal Bldg. - Room 4012
 Salt Lake City, Utah 841138

OFFICIAL BUSINESS
 PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
 U. S. DEPARTMENT OF AGRICULTURE
 AGR-101



FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

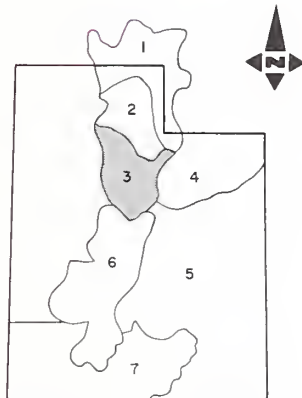
WATER SUPPLY OUTLOOK

UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS

LEGEND

- Watershed Boundary
- - - S. C. D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course
- + Aerial Marker
- Soil Moisture Station
- SCS Precipitation Gage
- NWS Precipitation Gage
- Temperature Gage
- Snow Sensor
- Radio Telemetry
- Radio Base Station
- Radio Relay Station
- Snow Sensor with Snow Course



WATERSHED LOCATION



MARCH 1, 1977

THE WATER SUPPLY OUTLOOK IS WELL BELOW AVERAGE

SNOW COVER ranges from 31% of the March 1 average on Utah Lake drainages to 38% on Jordan River-Salt Lake drainages. Tooele Valley is now 37% of the March 1 average.

PRECIPITATION at mountain stations ranged from 34% at Timpanogos Divide to 103% of average at Silver Lake (Brighton). The October-February total now ranges from 26 to 51% of average.

SOIL MOISTURE is well below average.

RESERVOIR STORAGE is above average except at Deer Creek. All reservoirs have less storage than last year at this time.

STREAMFLOW FORECASTS now range from 12 to 51% of the April-July average. Inflow to Utah Lake is expected to be 35% of average, Provo River 25% at Hailstone and 17% at Deer Creek Dam. Strawberry Reservoir Inflow, Hobble Creek, Spanish Fork and Vernon Creek are all 14% of average. Big and Little Cottonwood Creeks are still 49 and 51%, but Parley's is only 12% of average.

Report prepared by
BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84138

STREAMFLOW FORECASTS	UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH						SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)			
	THIS YEAR			PAST RECORD			RIVER BASIN and or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS A PERCENT OF	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET		MINIMUM			Average	
	Thousand Acre Feet	Percent of Average		Last Year 2	Average †					
BASIN, STREAM and or FORECAST										
PROVO RIVER & UTAH LAKE										
American Fork nr American Fork	8.0	27	Apr-July	- -	29	PROVO RIVER & UTAH LAKE	12	92	31	
Hobble Creek nr Springville	2.2	14	Apr-July	- -	16	JORDAN RIVER & SALT LAKE	3	84	38	
Provo nr Hailstone	26	25	Apr-July	107	102	TOOELE VALLEY	2	- -	37	
Provo below Deer Creek Dam ¹	19.0	17	Apr-July	- -	111					
Spanish Fork at Thistle	4.5	14	Apr-July	- -	32					
Strawberry Reservoir Inflow ¹	6.4	14	Apr-July	38	45					
Utah Lake Inflow	73	35	Apr-July	- -	208					
Payson Creek nr Payson	2.2	35	Apr-July	- -	6.3					
JORDAN RIVER & SALT LAKE										
Big Cottonwood nr SLC	17.5	49	Apr-July	- -	36					
Little Cottonwood Crk nr SLC	18.0	51	Apr-July	- -	35					
Parley's Creek nr SLC	1.4	12	Apr-July	- -	11.7					
TOOELE VALLEY										
Vernon Creek nr Vernon	0.4	57	Mar-July	- -	0.7					
Settlement Crk nr Tooele	0.5	23	Apr-July	- -	2.2					
1 - Observed flow corrected for change in storage and diversions										
2 - Provisional flows - Subject to correction										

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING						PEAK FLOWS		
BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE			FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
			This Year	Last Year	Average †		Forecast Range	Average †
SPANISH FORK	Strawberry	270.0	207.2	243.8	116.4	Hobble Creek nr Springville	10 - 60	210
UTAH LAKE	Utah Lake	883.9	758.0	939.6	604.0	Spanish Fork nr Thistle	40 - 125	365
	Settlement Creek	1.2	0.6	1.0	- -	Big Cottonwood nr Salt Lake City	150 - 275	310
	Vernon Creek	0.6	0.5	0.6	- -	(a) - Maximum mean daily peak flow		
PROVO	Deer Creek	149.7	89.7	103.7	95.3			

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Federal Bldg. - Room 4012
Salt Lake City, Utah 841138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



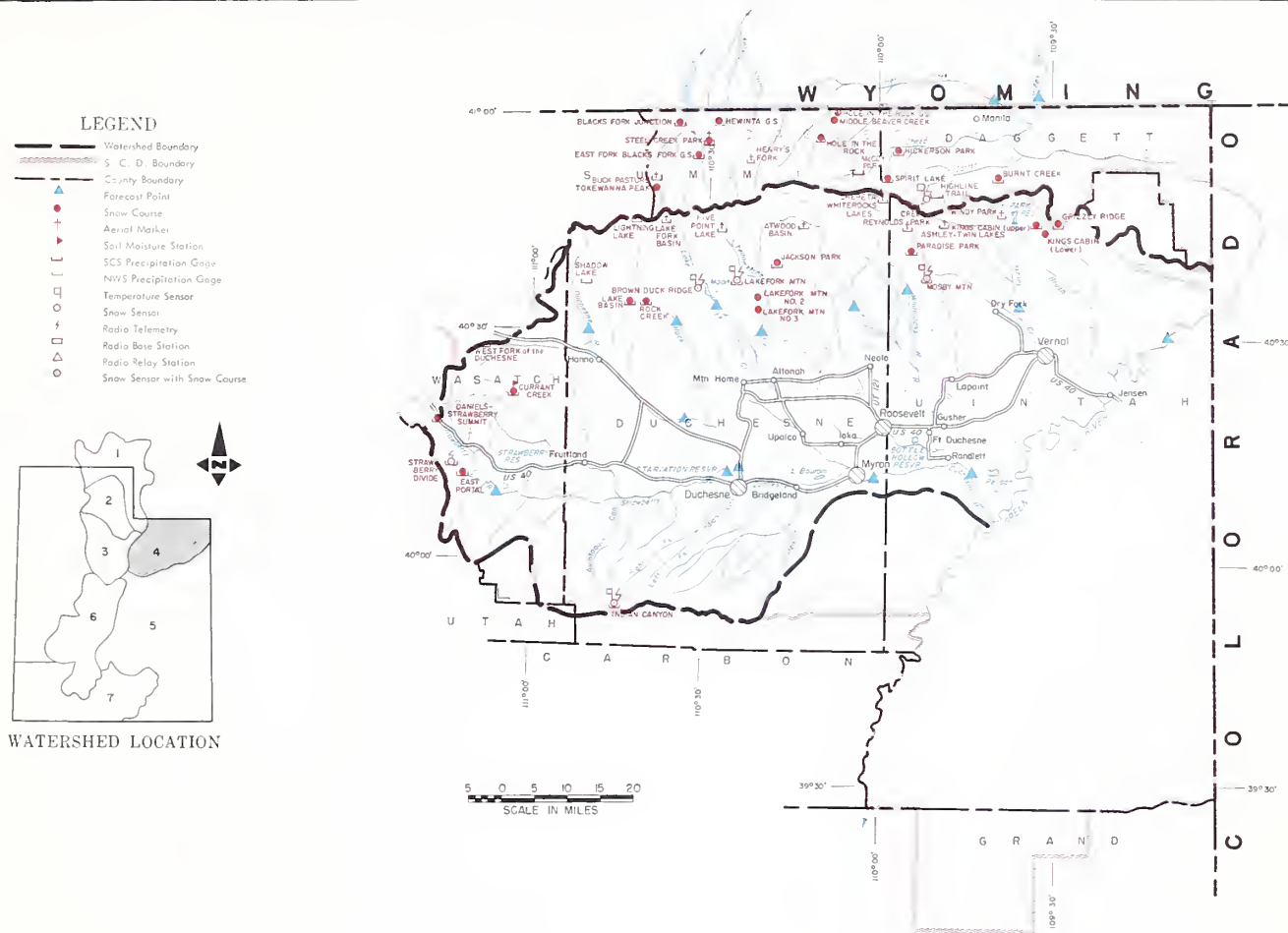
FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK

UINTAH BASIN and DAGGETT SCD's in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MARCH 1, 1977

THE WATER SUPPLY OUTLOOK IS POOR

SNOW COVER ranges from 13% on Uintah-Whiterocks to 32% on Strawberry River. Lakefork and Yellowstone are 15% and Ashley Creek 12% of the March 1 average. Black's Fork on the north slope is 35% of average. All measurements indicate readings 15 to 65% below previous record lows in 1961.

PRECIPITATION at mountain stations during February ranged from 23 to 67% of average. The total for October-February ranges from 28 to 73% of average.

SOIL MOISTURE is well below average.

RESERVOIR STORAGE is below average and below last year on March 1.

STREAMFLOW FORECASTS range from 5% for Duchesne at Randlett to 46% for Black's Fork at Millburne. Ashley Creek is 37%, Whiterocks 33%, Uintah 35%, Yellowstone 40%, Lakefork 41%, and Rock Creek 41% of the April-July average. The Duchesne is expected to be 27% at Tabiona, 26% at Duchesne, and 11% at Myton and Strawberry River 11%. Flaming Gorge Inflow is expected to be 32% of the April-July average.

UINTAH BASIN and DAGGETT SCD's in UTAH

STREAMFLOW FORECASTS

BASIN STREAM and or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year ²	Average ⁺
<u>DUCHESNE RIVER</u>					
Duchesne nr Tabiona ¹	28	27	Apr-July	- -	104
Duchesne at Duchesne ¹	48	26	Apr-July	- -	185
Duchesne at Myton ¹	25	11	Apr-July	- -	218
Duchesne at Randlett ¹	15.0	5	Apr-July	- -	267
Lakefork below Moon Lake ¹	28	41	Apr-July	- -	69
Rock Creek nr Mtn. Home	38	41	Apr-July	- -	94
Strawberry at Duchesne	6.1	11	Apr-July	- -	56
Uintah nr Neola	31	35	Apr-July	59	88
Whiterocks nr Whiterock	19	33	Apr-July	47	58
Yellowstone nr Altonah	26	40	Apr-July	- -	65
<u>FLAMING GORGE TO DUCHESNE RIVER</u>					
Ashley Creek nr Vernal	18.4	37	Apr-July	44	50
Black's Fork at Millburne	43	46	Apr-July	71	94
Flaming Gorge Inflow ¹	375	32	Apr-July	1329	1174
Henry's Fork at Linwood	12.0	24	Apr-Sept	- -	45
1 - Observed flow corrected for change in storage and diversions					
2 - Provisional flows - Subject to correction					

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS A PERCENT OF	
		MINIMUM	Average
DUCHESNE RIVER - TOTAL	6	62	20
LAKEFORK-YELLOWSTONE CREEKS	2	55	15
STRAWBERRY RIVER	3	85	32
UINTAH - WHITEROCKS RIVERS	2	37	13
ASHLEY CREEK	2	37	12
BLACK'S FORK	3	67	35

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average ⁺
<u>ASHLEY CREEK</u>	Steinaker	33.3	20.3	26.6	24.4
<u>GREEN RIVER</u>	Flaming Gorge	3749.0	2934.0	3303.8	1588.0
<u>LAKE FORK</u>	Moon Lake	35.8	7.2	20.0	17.8
<u>STRAWBERRY</u>	Starvation	165.3	165.8	140.8	- -
<u>UINTAH</u>	Bottle Hollow	11.3	10.6	10.2	- -

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
	Forecast Range	Average ⁺
Strawberry at Duchesne	100 - 200	628
Ashley Creek nr Vernal	300 - 400	906
(a) - Maximum mean daily peak flow		

+ - 1958-72 15 Year Average Period

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Federal Bldg. - Room 4012
Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE
AGR-101



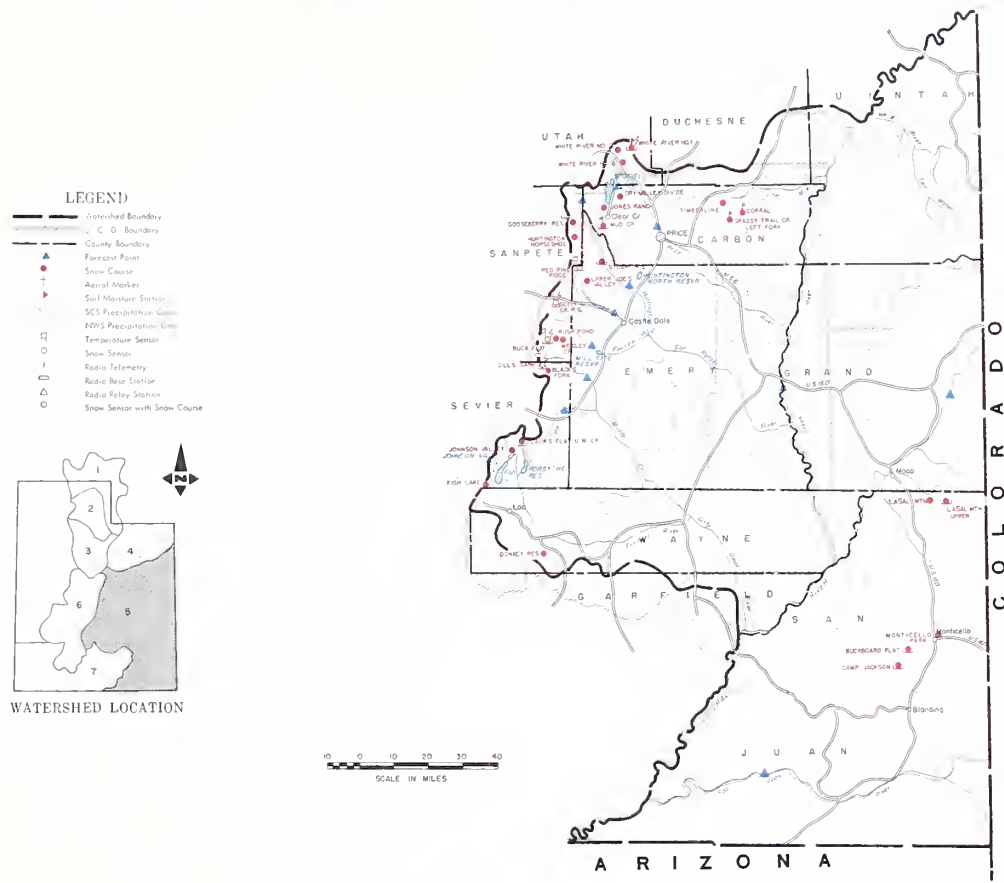
FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK

CARBON, EMERY, WAYNE, GRAND and SAN JUAN COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MARCH 1, 1977

THE WATER SUPPLY OUTLOOK IS POOR

SNOW COVER is now 26% of average on Price River and 31% on San Rafael tributaries. Snow water content measurements as of March 1 show 20 to 30% less than previous minimums.

PRECIPITATION at mountain stations was 48 to 76% of the February average and the total October-February precipitation ranged from 29 to 46% of average.

SOIL MOISTURE is well below average.

RESERVOIR STORAGE is near average, but still below last year at this time.

STREAMFLOW FORECASTS range from 16 to 47% of the April-July average. Most forecasts were reduced 4 to 8% since February 1. Scofield Inflow is expected to be 24% of average and the Price River at Heiner only 16%. Huntington Creek is expected to be 38% of average, Cottonwood Creek 39%, Ferron Creek 41%, and Muddy Creek 40% of the April-July average. Fremont River is forecast at 47% of average.

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	CARBON, EMERY, WAYNE, GRAND and				
	THIS YEAR		PAST RECORD		
	FORECAST		THOUSAND ACRE FEET		
	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year	Average †
BASIN, STREAM and/or FORECAST POINT					
<u>PRICE RIVER</u>					
Gooseberry Crk nr Scofield	4.0	40	Apr-July	- -	10.0
Price nr Heiner ¹	10.0	16	Apr-July	- -	64b
Scofield Reservoir Inflow	8.0	24	Apr-July	- -	34
<u>SAN RAFAEL RIVER</u>					
Cottonwood Crk nr Orangeville	17.8	39	Apr-July	- -	46b
Ferron Creek nr Ferron	14.4	41	Apr-July	33	35
Huntington Crk nr Huntington	17.2	38	Apr-July	- -	45
<u>MUDDY RIVER</u>					
Muddy Creek nr Emery	6.8	40	Apr-July	- -	17.0
<u>UPPER COLORADO BASIN</u>					
Colorado nr Cisco, Utah	892	31	Apr-July	2029	2835
Green at Green River, Utah	1031	36	Apr-July	2251	2839
Navajo Reservoir Inflow	233	39	Apr-July	- -	597
San Juan nr Bluff, Utah	313	37	Apr-July	634	853
Mill Creek nr Moab	2.0	41	Apr-July	5.9	4.9
<u>FREMONT RIVER</u>					
Seven Mile Crk nr Fish Lake	3.0	47	Apr-July	- -	6.4b

SAN JUAN COUNTIES in UTAH

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN	SUB-BASIN	Number of Gauging Stations	THIS YEAR AS A PERCENT OF	
			MINIMUM	Average †
PRICE RIVER		6	70	26
SAN RAFAEL RIVER		3	79	31

1 - Observed flow corrected for change in storage and diversions
2 - Provisional flows - Subject to correction

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average †
PRICE RIVER	Scofield	65.8	29.1	44.7	30.0
SAN RAFAEL	Huntington North	3.9	3.4	3.8	2.2
	Joe's Valley	54.6	37.4	42.2	31.6
	Mill Site	16.7	1.7	5.8	- -
SAN JUAN	Navajo	1696.0	1120.7	1100.1	- -

+ - 1958-72 15 Year Average Period

b - Average of all past record - less than 15 years

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
	Forecast Range	Average †
Ferron Creek near Ferron	100 - 200	419
Muddy Creek near Emery	50 - 75	157
(a) - Maximum mean daily peak flow		

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Federal Bldg. - Room 4012
Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



FIRST CLASS MAIL

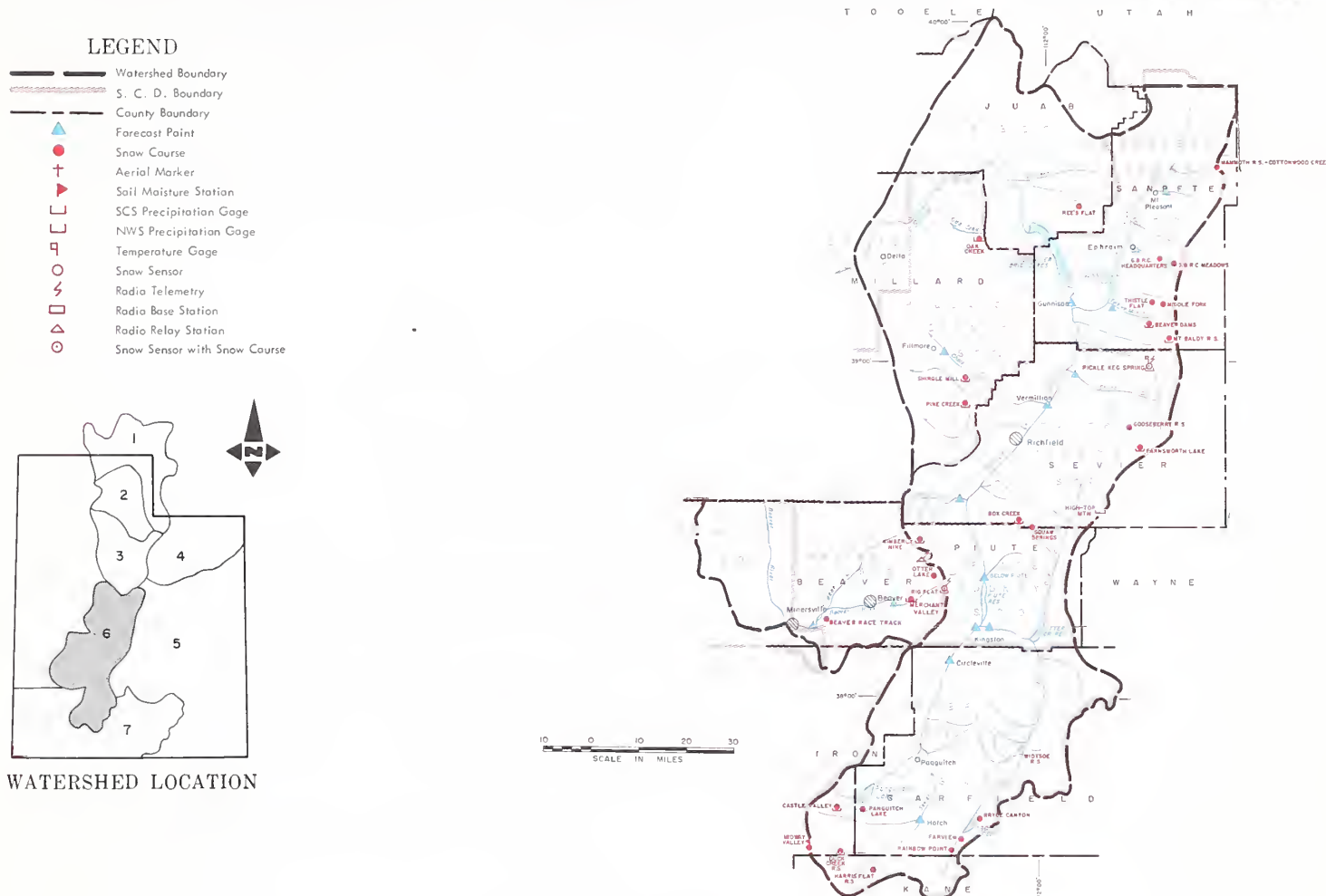


"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK

SEVIER RIVER BASIN including BEAVER RIVER in UTAH

**UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS**



MARCH 1, 1977

THE WATER SUPPLY OUTLOOK IS WELL BELOW AVERAGE

SNOW COVER ranges from 13% of the March 1 average on the South Fork Sevier to 51% on the Lower Sevier (Salina Creek and San Pitch River). The East Fork Sevier is 31% and Beaver River is 39% of average. All basins are at or below previous minimums of record for March 1. Many areas lost snow water due to melt during warm February temperatures.

PRECIPITATION at mountain stations ranged from 19 to 83% of the February average and now totals 36 to 60% of the October-February total.

SOIL MOISTURE is well below average.

RESERVOIR STORAGE on the three main Sevier Reservoirs (Otter, Piute, and Sevier Bridge) totals about average, but only 65% of last year at this time. Piute is only 56% of average. Gunnison Reservoir is 22% of average and Minersville is 58% of average and not expected to fill this season.

STREAMFLOW FORECASTS range from 16 to 47% of the April-July average. Sevier River is forecast 34% at Hatch, 36% at Circleville, 16% at Kingston, and 33% at Gunnison. Beaver River is forecast 36% near Beaver and 16% for Minersville Inflow. Clear Creek and Chalk Creek at 31% and Salina Creek 16% of average. Pleasant Creek and Ephraim Creek are 45 and 47% respectively.

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84138

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS		SEVIER RIVER BASIN INCLUDING BEAVER RIVER			
BASIN, STREAM and or FORECAST POINT	THIS YEAR		FORECAST PERIOD	PAST RECORD	
	Thousand Acre Feet	Percent of Average		THOUSAND ACRE FEET	
				Last Year	Average †
<u>SEVIER RIVER</u>					
Chalk Creek nr Fillmore	4.8	31	Apr-July	- -	15.5b
Clear Crk nr Sevier (abv Div)	4.7	31	Apr-July	28	15.0
East Fork Sevier nr Kingston ¹	3.0	21	Apr-July	- -	14.4
Antimony Crk nr Antimony Inflow	3.0	41	Apr-July	- -	7.3
Kingston to Vermillion Dam	11.5	23	Apr-June	- -	50
Vermillion Dam to Gunnison	16.5	42	Mar-June	- -	39
Salina Creek at Salina	1.3	16	Apr-June	24	8.1b
Sevier nr Circleville	10.0	36	Apr-July	- -	28
Sevier nr Gunnison	13.0	33	Apr-July	55	39
Sevier at Hatch	13.8	34	Apr-July	35	41
Sevier nr Kingston	3.4	16	Apr-July	16	21
Sevier below Piute Dam ¹	6.0	18	Apr-July	- -	33
<u>SAN PITCH RIVER</u>					
Ephraim Creek nr Ephraim	7.0	47	Apr-July	- -	13.9b
Pleasant Crk nr Mt. Pleasant	3.5	45	Apr-July	- -	7.8
<u>BEAVER RIVER</u>					
Beaver nr Beaver	7.1	36	Apr-July	18.4	20
Minersville Reservoir Inflow ¹	0.9	16	Apr-June	- -	5.8

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and SUBWATERSHED	Number of Gauging Stations Averaged	THIS YEAR AS A PERCENT OF	
		MINIMUM	Average
UPPER SEVIER RIVER	9	82	22
East Fork Sevier	3	95	31
South Fork Sevier	5	71	13
LOWER SEVIER	6	100	51
BEAVER RIVER	3	95	39

1 - Observed flow corrected for change in storage and diversions
2 - Provisional flows - Subject to correction

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average †
SEVIER RIVER	Gunnison	18.2	2.7	16.7	12.2
	Otter Creek	52.5	31.1	42.6	29.4
	Piute	71.8	24.2	45.6	43.0
	Sevier Bridge	236.0	117.7	177.8	100.0
BEAVER RIVER	Minersville (Rky Fd)	23.3	7.6	13.3	13.0

b - Average of all past record - less than 15 years
+ - 1958-72 15 Year average period

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Creek nr Sevier-above Div.	5	July 10	July 28
Salina Creek at Salina	25	May 10	June 10
Sevier at Circleville	90	May 21	June 24
Sevier at Hatch (upper)	100	May 24	July 10

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
	Forecast Range	Average †
Sevier River at Hatch	60 - 100	418
Sevier River nr Circleville	65 - 110	304
Sevier River nr Kingston	55 - 85	263
Beaver River nr Beaver	40 - 80	212
Salina Creek nr Salina	10 - 40	235
Clear Creek nr Sevier	35 - 75	170

(a) - Maximum mean daily peak flow

PRIMARY WATER RIGHT FORECASTS (PERCENT OF WATER RIGHT DELIVERED)

RIVER SECTION	Percent Forecast For This Year	Average Percent Delivered During 15 year Period †	Forecast Period
SEVIER RIVER			
Below Vermillion Dam	37	55	April-Sept
Circle Valley	35	65	April-Sept
Panguitch Valley	60	82	April-Sept
Sevier Valley	24	38	April-Sept

Inflow to Sevier Bridge Reservoir October 1 to March 31 is expected to be 60,000 to 70,000 acre feet.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Federal Bldg. - Room 4012
Salt Lake City, Utah 84138
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE
AGR-101



FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK

EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



THE WATER SUPPLY OUTLOOK IS POOR

SNOW COVER varies from 1% of the March 1 average on Enterprise-New Harmony drainages to 34% for Parowan Creek. Coal Creek is 17% and the Virgin River 18% of the March 1 average. Warm weather melted snow in this area in February.

PRECIPITATION at mountain stations ranged from 20% to near average.

SOIL MOISTURE is well below average.

RESERVOIR STORAGE in small reservoirs is reported below average. Lake Powell has 17,985,000 acre feet, down 1,853,000 acre feet from last year at this time.

STREAMFLOW FORECASTS range from 31% of the April-July average on Lake Powell Inflow to 38% on Santa Clara near Pine Valley. Virgin River is forecast at 35% of average and Coal Creek 34%. Most water users in this area are expected to have limited water supplies this season.

EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		FORECAST PERIOD	PAST RECORD	
	FORECAST			THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average +
<u>VIRGIN RIVER</u>					
Virgin nr Virgin	17.0	35	Apr-June	23e	48b
Santa Clara nr Pine Valley	1.0	38	Apr-June	2.2	3.6b
<u>COAL CREEK</u>					
Coal Creek nr Cedar City	5.5	34	Apr-July	9.7	16.1
<u>UPPER COLORADO</u>					
Lake Powell Inflow	2150	31	Apr-July	5395	6881
2 - Provisional Flows - Subject to correction					

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS A PERCENT OF	
		MINIMUM	Average
COAL CREEK	3	14	17
VIRGIN RIVER	2	127	18
PAROWAN CREEK	2	15	34
ENTERPRISE - NEW HARMONY	2	10	1

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average +
<u>COLORADO</u>	Lake Powell	25002.0	17985.0	19838.0	8401b
	Blue Mesa	829.5	393.2	444.8	- -
b - Average of all past record - less than 15 years + - 1958-72 15 Year Average Period					

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET) (a)	
	Forecast Range	Average +
Coal Creek nr Cedar City	40 - 75	245
Virgin nr Virgin	180 - 300	631b
(a) - Maximum mean daily peak flow		

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Federal Bldg. - Room 4012
Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)					
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
				Minimum	Average †	Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
GREAT BASIN											
UPPER BEAR RIVER (Above Harer, Idaho)											
Big Park	2/24	24	4.8	10.0	18.2	2/25	.97	- -	2.57	- -	- -
Burts-Miller Ranch	2/25	8	1.2	- -	- -						
CCC Camp	2/25	19	3.3	5.9	11.1						
Hayden Fork	2/25	26	5.0	- -	- -						
Kelly R.S.	2/24	23	4.2	11.7	16.6a	2/25	2.37	4.62b	6.31	22.89b	28
Monte Cristo R.S.	2/25	28	4.9	12.7	22.2						
Piney LaBarge	2/25	28	6.4	- -	- -						
Poison Meadows	2/25	37	8.1	- -	- -						
Salt River Summit	2/25	23	4.2	7.9	14.6	2/25	.50	3.36	3.94	14.17	28
Snyder Basin	2/25	19	3.6	- -	- -	2/25	1.67	- -	3.94	- -	- -
Stillwater Camp	2/25	18	3.1	- -	- -						
LOWER BEAR RIVER (Below Harer, Idaho)											
Christensen Ranch	2/28	18	3.4	- -	7.7	2/28	1.15	- -	- -	- -	- -
Cliff Canyon	2/28	7	1.2	- -	- -						
Cub River R.S.	2/28	18	4.5	- -	8.0						
Daniels Creek	2/28	6	0.8	- -	- -						
Dry Basin	2/28	33	6.7	- -	25.3	2/28	2.11	5.25b	5.20	19.03b	27
Dry Creek Flat	2/28	7	1.1	- -	6.6						
Emigrant Summit	2/28	23	4.3	- -	21.4a						
Emigration Canyon	2/28	12	2.7	- -	9.7a						
Franklin Basin	2/28	35	7.0	13.8	- -	2/28	1.37	4.00b	4.46	16.68b	27
Garden City Summit	2/28	17	3.2	9.4	16.1						
Horseshoe Basin	2/28	31	6.9	- -	23.2						
Klondike Narrows	2/28	27	5.7	10.8	17.9						
Liberty Springs	2/28	40	7.0	- -	33.8	2/28	1.58	2.52a	4.05	15.61a	26
Little Bear (lower)	2/25	13	2.1	0.0	10.1						
Little Bear (upper)	2/25	19	3.1	2.3	9.8						
Lower Elkhorn	2/28	10	1.8	- -	12.4a						
Oxford Mountain	2/28	13	1.0	- -	8.9	2/28	1.88	4.16b	5.87	19.02b	31
Slug Creek Divide	2/28	25	5.0	- -	14.7						
Steep Hollow #1	2/28	49	8.5	21.4	30.8b						
Steep Hollow #2	2/28	35	6.4	15.9	22.9b						
Strawberry Creek	2/28	10	2.1	- -	9.6	2/28	1.85	1.96a	3.90	9.53a	41
Strawberry Mink Divide	2/28	23	3.4	- -	18.5						
Tony Grove Lake	2/28	44	8.1	- -	- -						
Tony Grove R.S.	2/28	17	3.0	- -	11.2						
Upper Elkhorn	2/28	19	3.4	- -	16.0a	2/25	1.95	3.91b	4.23	17.21b	25
Willow Falt	2/28	19	2.6	- -	13.2						
Worm Creek	2/28	21	3.9	- -	- -						
RAFT RIVER											
Clear Creek Meadows	2/25	27	3.9	14.4	18.2a	2/25	1.64	4.44b	3.79	21.25b	18
One Mile Summit	2/25	6	0.9	4.0	6.8a						
Vipont (A)	2/25	20	4.0	15.5	12.7a						
OGDEN RIVER											
Beaver Creek-Skunk Creek	2/25	10	1.3	3.9	10.7	2/25	1.64	4.44b	3.79	21.25b	18
Ben Lomond Peak	2/25	37	6.8	18.8	30.1b						
Ben Lomond (lower)	2/25	23	4.1	1.6	13.0						
Causey Dam						2/25	.90	2.96a	2.47	12.03a	21
Cutler Creek	2/25	34	5.1	13.2	23.4b	2/25	1.95	3.91b	4.23	17.21b	25
Dry Bread Pond	2/25	19	3.3	8.0	15.3						
Sagebrush Flat	2/25	8	1.0	0.1	4.4						
WEBER RIVER											
Beaver Creek R.S.	2/28	12	2.0	3.8	7.7	2/25	1.85	1.96a	3.90	9.53a	41
Chalk Creek #1	2/25	36	5.7	10.0	18.1						
Chalk Creek #2	2/25	28	4.4	7.2	11.9						
Chalk Creek #3	2/25	18	3.0	1.0	6.5						
East Shingle Lake (A)	2/28	41	7.4	- -	- -	2/25	3.71	- -	8.87	- -	- -
Farmington Canyon (lower)	2/25	39	7.1	6.3	18.2						
Farmington Canyon (upper)	2/25	45	8.8	11.8	24.1						
Farmington G.S.						2/25	3.84	- -	9.23	- -	- -
Horse Ridge	2/25	25	3.9	13.1	19.4b	2/25	3.44	- -	5.64	22.61a	25

SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)					
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT. 1 TO DATE		
				Minimum	Average †	Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
WEBER RIVER (continued)											
Kilfoil Creek	2/25	20	3.1	7.2	12.6b						
Lost Creek Reservoir	2/25	6	0.9	0.0	--	2/25	1.17	--	--	--	--
Park City Summit	3/7	40	12.2	--	--						
Parleys Canyon Summit	2/25	38	6.8	9.1	15.5	2/25	3.92	4.08	6.52	18.16	36
Redden Mine (lower)	2/28	26	4.9	7.0	15.4						
Redden Mine (upper)						2/28	2.95	--	6.47	16.26a	40
Sergeant Lake (A)	2/28	30	4.8	--	--						
Smith & Morehouse	2/25	23	2.9	5.5	11.9b	2/25	2.05	3.32	4.90	14.94	33
PROVO RIVER & UTAH LAKE											
Beaver Creek Divide	2/28	22	3.9	--	--						
Camp Altamont	2/25	15	3.9	3.4	12.8						
Clear Creek Ridge #1	2/28	22	5.0	6.8	15.1						
Clear Creek Ridge #2	2/28	21	4.6	4.2	11.3	2/28	--	2.78	4.37	12.52	35
Clear Creek Ridge #3	2/28	9	2.0	0.6	6.9						
Dutchman R.S.	2/25	22	4.3	4.9	15.0	2/25	2.30	--	6.20	17.82	35
Hobble Creek Summit	2/25	20	4.3	4.7	11.9	2/25	1.55	--	4.87	13.88	35
Packard Canyon	2/25	14	3.2	--	8.6						
Payson R.S.		Not Measured		6.4	14.6			3.64		14.63	
Rock Bridge		Not Measured		2.7	10.0						
Soapstone R.S.	2/28	21	3.5	5.2	11.3	2/28	2.51	3.03	4.71	13.22	36
South Fork R.S.	2/23	15	3.0	0.0	4.9						
Timpanogos Cave Camp	2/23	3	0.4	0.0	2.2						
Timpanogos Divide	2/25	19	5.0	6.6	20.9	3/1	1.50	4.37	5.55	21.09	26
Trial Lake	2/28	28	5.1	11.5	20.5	2/28	2.66	4.34	6.62	19.26	32
JORDAN RIVER & GREAT SALT LAKE											
Lamb's Canyon		Not Measured									
Lamb's Canyon #2	2/25	34	5.9	--	--	2/25	2.83	--	4.72	--	--
Middle Canyon	2/28	22	5.5	2.0	11.3	2/28	2.00	3.52b	6.80	13.42b	51
Mill Creek	2/28	36	7.8	--	--						
Mill D South Fork	2/23	36	7.0	8.9	16.8						
Mt. Dell Dam						3/1	1.71e	2.36	3.64a	11.08	33
Silver Lake (Brighton)	2/23	36	5.8	10.8	19.6	3/1	5.10	4.94	8.66	22.67	38
Snow Bird (Gad Valley)	3/7	50	11.4	--	--						
Vernon Creek	2/28	9	2.0	4.6	--	2/28	.75	--	4.83	--	--
UPPER SEVIER RIVER (South of Richfield, Utah)											
Box Creek	2/28	22	4.3	4.9	10.5	2/28	2.25	--	6.13	11.05	55
Bryce Canyon	2/28	2	0.3	0.0	3.6						
Castle Valley	2/24	12	2.7	4.0	11.1	2/24	1.13	--	4.97	11.86	42
Duck Creek R.S.	2/24	3	0.3	0.2	11.1	2/24	.60	3.18b	5.10	14.23b	36
Farview	2/28	7	1.2	--	--						
Harris Flat	2/24	1	0.1	0.0	7.3						
Kimberly Mine	2/28	28	5.4	6.4	11.9	2/28	1.68	2.90b	6.24	13.24b	47
Midway Valley	2/24	17	3.1	5.2	17.3	2/24	.70	--	5.55	--	--
Panguitch Lake	2/24	5	0.5	0.0	3.8	2/24	.72	--	4.32a	5.95b	73
Rainbow Point	2/28	5	1.2	--	--						
Squaw Springs	2/28	8	1.6	1.6	6.1						
Widtsøe R.S.						2/23	.12	--	1.46a	--	--
LOWER SEVIER RIVER (Including San Pitch River)											
Beaver Dams		Not Measured		5.2	9.5						
Farnsworth Lake	2/28	35	7.2	9.1	14.2	2/28	3.25	3.93	8.90	14.76	60
G.B.R.C. Headquarters	2/28	20	5.5	3.8	13.3	2/28	1.80	3.90	6.75	14.30	47
G.B.R.C. Majors						2/28	.61	2.10	2.96	8.00	37
G.B.R.C. Meadows	2/28	34	8.5	10.8	19.2	2/28	2.60	4.90	8.06	18.00	45
G.B.R.C. Oaks						2/28	.93	2.60	3.88	9.60	40
Gooseberry R.S.	2/28	24	5.9	6.0	9.3	2/28	2.23	--	6.20	--	--
Mammoth-Cottonwood Creek	3/3	38	5.7	7.2	17.1b	3/3	3.25	3.76b	7.15	15.35b	47
Middle Fork		Not Measured		12.0	--						
Mt. Baldy R.S.		Not Measured		9.3	17.8						
Oak Creek	2/25	28	5.0	--	--	2/25	.96	--	4.96	--	--
Pickle Keg Springs		Not Measured		--	--						
Pine Creek	2/28	32	8.0	8.1	12.6	2/28	2.47	--	10.80	17.64	61
Ree's Flat		Not Measured		4.8	9.6						
Shingle Mill	2/25	18	3.4	0.6	7.1b	2/25	1.44	2.59b	5.75	10.73b	54
Thistle Flat		Not Measured									

SNOW

SNOW	THIS YEAR		PAST RECORD		PRECIPITATION (Inches)							
	DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
					NAME	Minimum	Average +	Date of Reading	Month's Precipitation	Average +	This Year	Average +
BEAVER RIVER												
Beaver Race Track	3/1	0	0.0	--	--							
Beaver Canyon Power House						3/1	.47	1.92	3.14	7.08	44	
Big Flat	2/28	22	4.7	5.8	13.2	2/28	.99	3.43	6.05	12.90	47	
Merchant's Valley	2/28	18	3.8	1.7	6.9	2/28	.98	2.83a	5.69	10.82a	53	
Otter Lake	2/28	21	3.8	5.2	10.9							
PAROWAN CREEK												
Birch Crossing	2/23	4	0.5	3.7	--							
Brian Head	2/24	24	4.5	11.8	--							
Ed Ward Flat	2/24	9	1.9	2.1	6.1							
Tall Poles	2/23	17	3.6	8.8	--	2/23	.50	2.49a	5.50	14.71a	37	
Yankee Reservoir	2/24	14	2.7	3.4	7.5	2/24	1.23	--	4.50	9.13b	49	
ENTERPRISE TO NEW HARMONY DRAINAGES												
Little Grassy Creek	2/24	0	0.0	0.0	3.1b	2/24	.90	--	--	11.25b	--	
Long Flat	2/24	1	0.1	1.0	4.9	2/24	.30	--	3.45	8.61b	40	
COAL CREEK												
Cedar City Golf Course	2/24	0	0.0	--	--							
SUSC Ranch	2/23	3	0.2	1.4	5.5b							
COLORADO RIVER DRAINAGE												
UPPER GREEN RIVER - UTAH												
Ashley-Twin Lakes (A)	2/28	15	2.7	2.4	--							
Black's Fork G.S.-East Fork	2/25	18	3.3	3.6	7.5b	2/25	1.56	--	4.24	9.43b	45	
Black's Fork Junction	2/25	16	2.4	4.4	8.2b	2/25	1.36	--	3.56	9.25b	38	
Buck Pasture (A)	2/28	36	6.5	5.8	--							
Burnt Creek	2/23	8	1.4	--	--	2/23	.30	1.06b	2.10	7.53b	28	
Grizzly Ridge	2/23	9	2.0	--	--	2/23	.45	1.93b	3.00	11.24b	27	
Henry's Fork (A)	2/28	25	3.8	5.9	--							
Hewinta G.S.	2/25	16	2.4	4.1	7.4b	2/25	1.51	--	3.92	9.95b	39	
Hickerson Park	2/25	11	1.7	1.9	5.1b	2/25	.50	--	4.86	6.65a	73	
Highline Trail	2/25	15	2.6	--	--	2/25	.46	--	3.11	--	--	
King's Cabin (lower)	2/25	4	0.7	1.8	6.9							
King's Cabin (upper)	2/25	8	1.1	3.1	8.3	2/25	.27	--	4.87	9.10	54	
Reynolds Park (A)	2/28	12	2.2	--	--							
Spirit Lake	2/25	17	3.4	3.8	10.0b	2/25	.92	--	5.25	11.51b	46	
Steel Creek Park		Not Measured		7.5	12.2b							
Trout Creek	2/25	12	1.7	--	--	2/25	.55	--	--	--	--	
Windy Park (A)	2/28	2	0.3	2.2	--							
DUCHESNE RIVER												
Atwood Lake (A)	2/28	8	1.4	2.5	--							
Brown Duck Ridge	2/28	24	4.1	--	--	2/28	1.99	--	--	--	--	
Chepeta-Whiterocks (A)	2/28	8	1.4	2.3	--							
Currant Creek	2/25	9	1.5	--	--	2/25	1.45	--	3.35	--	--	
Daniels-Strawberry Summit	2/25	18	3.7	4.0	12.2	2/25	1.75	3.39	5.00	14.60	34	
East Portal	2/28	14	3.0	4.2	9.6	2/28	1.66	3.20b	4.38	15.68b	28	
Five Points Lake (A)	2/28	21	3.6	6.2	--							
Indian Canyon	2/28	15	2.8	3.3	10.2	2/28	1.45e	2.18b	3.59a	11.25b	32	
Jackson Park	2/28	16	2.6	--	--	2/28	1.10	--	4.80	--	--	
Lake Basin	2/28	20	4.5	--	--	2/28	2.06	--	4.80	--	--	
Lakefork Basin (A)	2/28	28	4.5	--	--							
Lakefork Mountain	2/28	10	1.6	3.6	9.5	2/28	1.12	2.13	5.34	10.22	52	
Lakefork Mountain #2		Not Measured		1.7	6.8							
Lakefork Mountain #3	2/28	4	0.6	0.4	5.6							
Lightning Lake (A)	2/28	24	4.1	--	--							
Mosby Mountain	2/28	8	1.4	3.2	8.4	2/28	.62	1.98a	--	9.16a	--	
Paradise Park	2/28	6	1.1	3.6	10.5	2/28	.68	2.23b	3.87	12.95b	30	
Rock Creek Ranch	2/28	6	1.2	--	--	2/28	1.19	--	3.92	10.93	36	
Shadow Lake (A)		Not Measured										
Strawberry Divide	2/28	27	5.5	6.2	16.2							

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)					
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
				Minimum	Average +	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
PRICE RIVER											
Dry Valley Divide	2/28	12	2.7	3.4	9.6						
Gooseberry Reservoir	3/3	28	4.3	7.3	15.2	3/3	1.90	3.94	6.10	15.00	41
Jones Ranch	2/28	7	1.4	0.0	5.8						
Mud Creek	2/28	16	2.5	3.5	11.4	2/28	1.85	2.74b	4.15	11.60b	36
White River #1	2/28	16	3.4	4.0	11.3	2/28	1.60	- -	4.05	11.08	37
White River #2	2/28	10	2.0	2.8	7.9						
White River #3	2/28	7	2.1	6.3	7.3						
SAN RAFAEL RIVER											
Buck Flat	3/3	25	5.6	5.8	13.5	3/3	2.60	3.97	6.60	14.29	46
Huntington-Horseshoe	3/3	48	8.6	13.5	- -						
Orange Olsen	2/28	5	1.0	- -	- -	2/28	1.25	1.65a	3.26	7.93a	41
Red Pine Ridge	2/28	22	5.3	6.4	14.9	2/28	3.00	4.42	7.15	16.82	43
Rush Pond	3/3	20	4.5	4.4	11.7						
Seeley Creek R.S.	2/28	15	3.4	5.4	13.7	2/28	3.10	- -	- -	- -	- -
Stuart R.S.	2/28	8	1.4	- -	- -	2/28	1.55	- -	3.55	12.16	29
Upper Joe's Valley	2/28	13	2.8	2.8	9.1						
Wrigley Creek	3/3	16	4.4	2.9	9.3						
MUDDY RIVER											
Black's Fork	3/3	20	5.5	11.4	- -						
Dill's Camp	3/3	17	4.2	10.6	- -	3/3	2.70	- -	5.90	- -	- -
FREMONT RIVER											
Black's Flat-U.M. Creek	2/28	20	4.7	3.8	8.6	2/28	2.59	- -	5.64	9.34	60
Fish Lake	2/28	6	1.1	0.1	5.6	2/28	1.57	- -	4.20	7.54b	56
Johnson Valley	2/28	9	2.2	1.4	5.2						
SOUTHEASTERN UTAH DRAINAGES											
Buckboard Flat	2/24	10	1.2	3.4	10.0	2/24	.65	- -	2.90	15.00	19
Camp Jackson	2/24	12	2.0	1.9	9.5	2/24	.29	- -	3.44	13.40b	26
LaSal Mountain (lower)	2/25	7	0.8	2.7	7.0						
LaSal Mountain (upper)	2/25	17	2.7	4.9	11.7b	2/25	1.11	- -	4.71	12.26b	38
Monticello City Park	3/1	0	0.0	- -	- -						
ESCALANTE RIVER											
Widtsoe-Escalante Summit	2/23	5	0.6	1.5	5.7						
Widtsoe-Escalante #2	2/23	6	0.8	2.2	7.3						
Widtsoe-Escalante #3	2/23	10	1.6	4.4	8.9	2/23	.62	2.53	3.86	10.37	37
VIRGIN RIVER											
Kolob-Crystal	2/24	13	3.0	0.0	- -						
Long Valley Junction	2/24	0	0.0	0.0	3.9						
Webster Flat	2/24	12	2.8	2.2	12.1b	2/24	.77	3.92	6.85	15.67	44
a - Partly Estimated b - Average of all past record - less than 15 years + - 1958-72 15 year average period (A) - Aerial Marker Reading											

INDEX TO UTAH, BEAR & UPPER COLORADO RIVER BASINS

GREAT BASIN DRAINAGE

10G11

10G6P

10G10

10J26P

10G12

10G17S

10J35P

10G10

10G6

10G8P

10G13MP

10J17P

W

U

W

U

W

W

U

W

W

W

W

U

UPPER BEAR RIVER (above Hazer, Idaho)

Big Park

Burt-Walker Ranch

GC Camp x

Healy Fork

Healy Ranger Station

Laborer Guard Station x

Lily Lake

Monte Cristo R.S.

Piney Labogae x

Poison Labogae x

Salt River Summit x

Snyder Basin x

Stillwater Camp

7

19

10

25

13

7

34

4

19

29

32

15

32

27N

3N

1N

1N

26N

30N

2N

8N

29N

29N

29N

29N

2N

17W

10E

18E

9E

116W

116W

10E

4E

114W

116W

118W

113W

10E

8,700

7,900

7,500

10,000

9,200

9,000

9,300

8,960

8,820

8,500

7,900

8,400

8,550

11J18P

11J21P

10J8PST

U

U

U

Timpanogos Cove Camp

Timpanogos Divide

Trial Lake

27

33

5

4S

4S

2S

2E

3E

9E

5,500

8,140

9,800

10J31P

9J120P

U

U

Takevanna Peak

Windy Park

23

1

1N

15

11E

20E

9,800

9,400

11H37P

11G11

11H38P

12H1P

11G12

11H33P

11H39P

11G140

12G4

11G6

11G8PST

11H7MP

13H45P

12H2P

11H40P

11G150

11H1MP

11G113

11H26

11H25P

11H6

12G3

11H46P

11G5

11H15

11G29

11G9

11G10

11H20P

11H3M

11H41P

11G4P

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

U.S. Department of Agriculture
Soil Conservation Service
Forest Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
FEDERAL BLDG., - ROOM 4012
125 SOUTH STATE ST.
SALT LAKE CITY, UTAH 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



FIRST CLASS MAIL

U.S. DEPT. OF AGRICULTURE
SOIL CONSERVATION SERVICE
WASHINGTON, D.C. 20250

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*